BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Modified Estimate for Construction of RCC drains and culverts at Amba Bhavani layout, Chowdappa layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sl No	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				m	m	m		in Rs	in Rs
1	KSRRB300-1. Earthwork excavation by manual means for Drains and similar works in ordinar soil excavated surface levelled and sides neatly dressed, the dispossed earth to be levelled neatly after breaking of clods completed as per specifications. KPWD S.R 2018-19.								
	RCC Drain	Cum							
	1st main Chowdappa Layout West		1	188.80	1.10	0.90	186.91		
	1st main Chowdappa Layout East Side (From Dead End)		1	181.20	1.10	0.90	179.39		
	2nd main B T Nagraj Layout West		1	137.60	1.10	0.90	136.22		
	2nd main B T Nagraj Layout East Side (From Dead End)		1	126.50	1.10	0.90	125.24		
	1st main B T Nagraj Layout West		1	303.40	1.10	0.90	300.37		
	1st main B T Nagraj Layout East Side(From Amba Bhavani layout)		1	283.30	1.10	0.90	280.47		
	Cross Road B T Nagraj Layout		1	29.00	1.10	0.90	28.71		
	15th Cross Road B T Nagraj Layout North Side		1	27.70	1.10	0.90	27.42		
	15th Cross Road B T Nagraj Layout South Side		1	19.70	1.10	0.90	19.50		
	14th Cross Road B T Nagraj Layout North Side		1	27.50	1.10	0.90	27.23		
	14th Cross Road B T Nagraj Layout South Side		1	27.50	1.10	0.90	27.23		
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	1.10	0.90	187.51		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	1.10	0.90	203.94		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	1.10	0.90	105.04		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	1.10	0.90	121.77		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	1.10	0.90	43.07		
	Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	1.10	0.90	43.07		
	Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	1.10	0.90	37.03		
	Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	1.10	0.90	37.03		
	Cross Road		1	92.00	1.10	0.90	91.08		
	For Kerb Stone								
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	0.20	0.23	8.71		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	0.20	0.20	8.24		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	0.20	0.20	4.24		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	0.20	0.20	4.92		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	0.20	0.20	1.74		
	Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	0.20	0.20	1.74		

	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				m	m	m		in Rs	in Rs
	Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	0.20	0.20	1.50		
	Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	0.20	0.20	1.50		
	Culvert		10	6.13	1.40	1.00	85.82		
							2326.60	211.79	**492751.33**
	Approved Rate Rs.=	211.79							
2	KSRRB M2900-1. Plain cement concrete M10 mix with crushed stone aggregates 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials, labour,HOM completed as per specifications								
	RCC Drain	Cum							
	1st main Chowdappa Layout West		1	188.80	1.10	0.15	31.15		
	1st main Chowdappa Layout East Side (From Dead End)		1	181.20	1.10	0.15	29.90		
	2nd main B T Nagraj Layout West		1	137.60	1.10	0.15	22.70		
	2nd main B T Nagraj Layout East Side (From Dead End)		1	126.50	1.10	0.15	20.87		
	1st main B T Nagraj Layout West		1	303.40	1.10	0.15	50.06		
	1st main B T Nagraj Layout East Side(From Amba Bhavani layout)		1	283.30	1.10	0.15	46.74		
	Cross Road B T Nagraj Layout		1	29.00	1.10	0.15	4.79		
	15th Cross Road B T Nagraj Layout North Side		1	27.70	1.10	0.15	4.57		
	15th Cross Road B T Nagraj Layout South Side		1	19.70	1.10	0.15	3.25		
	14th Cross Road B T Nagraj Layout North Side		1	27.50	1.10	0.15	4.54		
	14th Cross Road B T Nagraj Layout South Side		1	27.50	1.10	0.15	4.54		
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	1.10	0.15	31.25		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	1.10	0.15	33.99		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	1.10	0.15	17.51		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	1.10	0.15	20.30		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	1.10	0.15	7.18		
	Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	1.10	0.15	7.18		
	Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	1.10	0.15	6.17		
	Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	1.10	0.15	6.17		
	Cross Road		1	92.00	1.10	0.15	15.18		
	For Kerb Stone								
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	0.20	0.10	3.79		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	0.20	0.10	4.12		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	0.20	0.10	2.12		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	0.20	0.10	2.46		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	0.20	0.10	0.87		

	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				m	m	m		in Rs	in Rs
	Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	0.20	0.10	0.87		
	Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	0.20	0.10	0.75		
	Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	0.20	0.10	0.75		
	Culvert		10	6.13	1.40	0.15	12.87		
							396.63	4479.56	**1776734.60**
	Approved Rate Rs.=	4479.56							
3	KSRRB M2200-6. Providing TMT Bars Fe 500 steel reinforcement for RCC work including Straightening, cutting, bending, hooking, placing in position, lapping and/or welding whereever required, tying with binding wire and anchoring to the adjoining members whereever necessary completed as per design ans specification.								
		Ton							
	For drain		1	740.02		0.06	44.40		
	For culvert		1	34.33		0.09	3.09		
							47.49	72326.98	**3434892.90**
	Approved Rate Rs.=	72326.98							
4	Providing and laying plain/reinforced cement concrete for side drains wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs with 29mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregate at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200 including cost of materials, labour, HOM complete as per specifications.								
	RCC Drain	Cum							
	Raft								
	1st main Chowdappa Layout West		1	188.80	1.00	0.15	28.32		
	1st main Chowdappa Layout East Side (From Dead End)		1	181.20	1.00	0.15	27.18		
	2nd main B T Nagraj Layout West		1	137.60	1.00	0.15	20.64		
	2nd main B T Nagraj Layout East Side (From Dead End)		1	126.50	1.00	0.15	18.98		
	1st main B T Nagraj Layout West		1	303.40	1.00	0.15	45.51		
	1st main B T Nagraj Layout East Side(From Amba Bhavani layout)		1	283.30	1.00	0.15	42.50		
	Cross Road B T Nagraj Layout		1	29.00	1.00	0.15	4.35		
	15th Cross Road B T Nagraj Layout North Side		1	27.70	1.00	0.15	4.16		
	15th Cross Road B T Nagraj Layout South Side		1	19.70	1.00	0.15	2.96		
	14th Cross Road B T Nagraj Layout North Side		1	27.50	1.00	0.15	4.13		
	14th Cross Road B T Nagraj Layout South Side		1	27.50	1.00	0.15	4.13		
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	1.00	0.15	28.41		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	1.00	0.15	30.90		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	1.00	0.15	15.92		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	1.00	0.15	18.45		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	1.00	0.15	6.53		

Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
			m	m	m		in Rs	in Rs
Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	1.00	0.15	6.53		
Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	1.00	0.15	5.61		
Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	1.00	0.15	5.61		
Cross Road		1	92.00	1.00	0.15	13.80		
Wall								
1st main Chowdappa Layout West		2	188.80	0.15	0.60	33.98		
1st main Chowdappa Layout East Side (From Dead End)		2	181.20	0.15	0.60	32.62		
2nd main B T Nagraj Layout West		2	137.60	0.15	0.60	24.77		
2nd main B T Nagraj Layout East Side (From Dead End)		2	126.50	0.15	0.60	22.77		
1st main B T Nagraj Layout West		2	303.40	0.15	0.60	54.61		
1st main B T Nagraj Layout East Side(From Amba Bhavani layout)		2	283.30	0.15	0.60	50.99		
Cross Road B T Nagraj Layout		2	29.00	0.15	0.60	5.22		
15th Cross Road B T Nagraj Layout North Side		2	27.70	0.15	0.60	4.99		
15th Cross Road B T Nagraj Layout South Side		2	19.70	0.15	0.65	3.84		
14th Cross Road B T Nagraj Layout North Side		2	27.50	0.15	0.65	5.36		
14th Cross Road B T Nagraj Layout South Side		2	27.50	0.15	0.65	5.36		
Amba Bhavani Main Road NORTH Side(From Main Road)		2	189.40	0.15	0.65	36.93		
Amba Bhavani Main Road SOUTH Side(From Dead End)		2	206.00	0.15	0.60	37.08		
4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		2	106.10	0.15	0.60	19.10		
4th Cross Sai Nagar South Side(From Best County II)		2	123.00	0.15	0.60	22.14		
Cross Road 1 North Side(From Sai Baba Maindir Road)		2	43.50	0.15	0.60	7.83		
Cross Road 1 South Side(From Sai Baba Maindir Road)		2	43.50	0.15	0.60	7.83		
Cross Road 2 North Side(From Sai Baba Maindir Road)		2	37.40	0.15	0.60	6.73		
Cross Road 2 South Side(From Sai Baba Maindir Road)		2	37.40	0.15	0.60	6.73		
Cross Road		2	92.00	0.15	0.60	16.56		
For RCC CULVERT Raft		10	6.13	1.40	0.25	21.46		
For RCC CULVERT wall		20	6.13	0.25	0.42	12.87		
						774.35	7070.20	**5474841.19**
Approved Rate Rs.=	7070.20							

5	supplying and fixing precast reinforced concrete slab 100mm thick of mix M20 using 20mm and downside graded granite metal using reinforcement 10mm dia steel at 150mm c/cboth ways cost of transportation, hire charges of machinary, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of materials.								
	RCC Drain	Sqm							
	1st main Chowdappa Layout West		1	188.80	0.90	--	169.92		
	1st main Chowdappa Layout East Side (From Dead End)		1	181.20	0.90	--	163.08		
	2nd main B T Nagraj Layout West		1	137.60	0.90	--	123.84		
	2nd main B T Nagraj Layout East Side (From Dead End)		1	126.50	0.90	--	113.85		

	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				m	m	m		in Rs	in Rs
	1st main B T Nagraj Layout West		1	303.40	0.90	--	273.06		
	1st main B T Nagraj Layout East Side(From Amba Bhavani layout)		1	283.30	0.90	--	254.97		
	14th Cross Road B T Nagraj Layout North Side		1	27.50	0.90	--	3.60		
	14th Cross Road B T Nagraj Layout South Side		1	27.50	0.90	--	24.75		
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	0.90	--	170.46		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	0.90	--	185.40		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	0.90	--	95.49		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	0.90	--	110.70		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	0.90	--	39.15		
	Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	0.90	--	39.15		
	Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	0.90	--	33.66		
	Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	0.90	--	33.66		
	Cross Road		1	92.00	0.90	--	82.80		
							1917.54	2337.00	**4481290.98**
	Approved Rate Rs.=	2337.00							
6	providing and laying precast drain slabs of thick 250mm thick of mix M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finishing surface on both sides etc., completed as per drawing and direction of engineer in charge of work.								
		Sqm							
	Culert		10	6.13	1.20	--	73.56		
							73.56	5418.00	**398548.08**
	Approved Rate Rs.=	5418.00							
7	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 150 x 400 mmmade out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete.								
		Nos							
	Kerb Stone								
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	--	--	189.40		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	--	--	206.00		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	--	--	106.10		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	--	--	123.00		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	--	--	43.50		
	Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	--	--	43.50		
	Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	--	--	37.40		
	Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	--	--	37.40		
	Deduction		-1	20.00	--	--	-20.00		
							766.30		

	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				m	m	m		in Rs	in Rs
							1703.00	477.00	812331.00
	Approved Rate Rs.=	477.00							
	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.								
	Kerb Stone	Sqm							
	Amba Bhavani Main Road NORTH Side(From Main Road)		1	189.40	--	0.30	56.82		
	Amba Bhavani Main Road SOUTH Side(From Dead End)		1	206.00	--	0.30	61.80		
	4th Cross Sai Nagar North Side(From Hesaraghatta Main Road)		1	106.10	--	0.30	31.83		
	4th Cross Sai Nagar South Side(From Best County II)		1	123.00	--	0.30	36.90		
	Cross Road 1 North Side(From Sai Baba Maindir Road)		1	43.50	--	0.30	13.05		
	Cross Road 1 South Side(From Sai Baba Maindir Road)		1	43.50	--	0.30	13.05		
	Cross Road 2 North Side(From Sai Baba Maindir Road)		1	37.40	--	0.30	11.22		
	Cross Road 2 South Side(From Sai Baba Maindir Road)		1	37.40	--	0.30	11.22		
	Deduction		-1	20.00	--	0.30	-6.00		
							229.92	84.80	**19497.22**
	Approved Rate Rs.=	84.80							
9	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications.								
		Cum							
	Road						0.00		
							0.00	57.03	**0.00**
	Approved Rate Rs.=	57.03							
10	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method by rotavator at OMC,spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.								
		Cum							
	Road						0.00		
							0.00	1855.00	**0.00**
	Approved Rate Rs.=	1855.00							
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.								
		Cum							
	Road						0.00		
							0.00	2001.28	**0.00**
	Approved Rate Rs.=	2001.28							

	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				m	m	m		in Rs	in Rs
	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.								
	Road	Sqm							
							0.00		
							0.00	33.92	**0.00**
	Approved Rate Rs.=	33.92							
3	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications.								
		Sqm							
	Road						0.00		
							0.00	5.30	**0.00**
	Approved Rate Rs.=	5.30							
4	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications								
		Sqm							
	Road						0.00		
							0.00	12.72	**0.00**
	Approved Rate Rs.=	12.72							
15	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. Clause 505 of morth V revision using 40/60 TPH capacity H.M.P. with mechanical paver Gr-II (50mm to 75mm) with 4.5% VG-30 Bitumen. Page No. 160/ Item No. 21.17.6/ PWD SR 2018-19 Issue Rates								
		Cum							
	Road						0.00		
							0.00	7428.48	**0.00**
	Approved Rate Rs.=	7428.48							
16	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. clause No. 507 of MORTH V revision & IRC-SP-53-2010. - using40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (30 mm to 45mm) with 5.4% CRMB 55 (Pg:162, It.No-21.23.6 PWD SR:2018-19)Issue Rates								
		Cum							
	Road						0.00		
							0.00	8831.92	**0.00**
	Approved Rate Rs.=	8831.92							

Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
			m	m	m		in Rs	in Rs
KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 Page No. 182/ Item No. 24.15 PWD SR 2018-19								
	Sqm							
Road						0.00		
						0.00	454.74	**0.00**
Approved Rate Rs.=	454.74							
							Sub Total 1 Rs.	**16890887.30**
							Miscellaneous & Rounding off	**3800.33**
							Total Rs.	**16894687.63**

Assistant Engineer
Ward 03
BBMP

Assistant Executive Engineer
Yelahanka Satellite Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

Technical Sanction
Accorded For RS16894687.63
Head of A/C. 1.3945
CER NO :... HQ..... Dt. 03.11.2020

DE (TS)